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EXAMINER	
SERRAO, RANODHI N	
ART UNIT	**PAPER NUMBER**
2141	

DATE MAILED: 10/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/735,590	JONES ET AL.	
	Examiner	**Art Unit**	
	Ranodhi Serrao	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-92* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-92* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 21 August 2006 have been fully considered but they are not persuasive.

2. The applicant argued in substance the newly added claims 88-92. However, the prior art of record teach these added features. See below rejections.

3. The applicant furthermore argued that as per independent claim 1, Hoyer fails to teach the cluster manager comparing the performance values of different web servers or clusters. And that the system disclosed in Hoyer provides the tools to compare the performance of different web servers or clusters, but only a human, utilizing those tools, is capable of comparing the performance of different web servers or clusters. However, this is incorrect since in col. 5, lines 23-35, Hoyer states explicitly, "Cluster Group: Grouping of web servers with identical configurations." And in col. 7, lines 21-37, Hoyer states, "The cluster manager 400 maintains the overall configuration of the clusters, such as **clustering group**..." Emphasis added. Furthermore the grouping of clusters is further described in col. 16, line 58-col. 17, line 16.

4. As per claim 21, the applicant argued that, because only a singe CCM is utilized to distribute content to its specified nodes, it would be impossible for the nodes a CCM manages to utilize different synchronization mechanisms. The examiner points out that Basani states, "An assignment is delivered to a set of GLs..." in col. 12, lines 44-53. An assignment command consists of a buffer structure. Furthermore in col. 19, lines 34-57, Basani states, "As a final step in carrying out a content distribution job, the CCM

synchronize content switchover in all back end servers by sending out another assignment after the content has been successfully distributed." The above-mentioned elements of Basani read upon the broad interpretation of the claim. The examiner points out that the pending claims must be "given the broadest reasonable interpretation consistent with the specification" [In re Prater, 162 USPQ 541 (CCPA 1969)] and "consistent with the interpretation that those skilled in the art would reach" [In re Cortright, 49 USPQ2d 1464 (Fed. Cir. 1999)].

5. As per the applicant's arguments concerning claims 57 and 67, Basani in col. 5, lines 36-59, explicitly states, "Remote servers are administratively **divided into 'content groups.'** Content Groups are logical groupings of remote servers that will participate in or receive the content distribution, either within a LAN or across WANs. Assignments, which comprise assignment commands and the content data, are then forwarded to dynamically configured cluster Group Leaders ("GLs")." And in col. 16, lines 8-29, states, "The list of GLs will be sorted and ordered according to location, **performance and distance parameters**, as well as speed and reliability of the network connection to the GL." Emphasis added. Therefore Basani teaches the invention as claimed.

6. The applicant furthermore argued that the prior art that were utilized to reject the dependent claims fail to teach the limitations of the independent claims. All rejections of the dependent claims are maintained.

7. In conclusion, upon taking the broadest reasonable interpretation of the claims, the cited references teach all of the claimed limitations. And the rejections are reaffirmed. See below.

Claim Rejections - 35 USC § 102

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Hoyer et al. (6,263,361). Hoyer et al. teaches a source device, comprising: a plurality of connection interfaces; and a cluster manager configured to determine performance similarities for a plurality of connections (col. 7, lines 21-37) and configured to group the plurality of connections into performance clusters based on the determined performance similarities (col. 5, lines 33-35 and col. 16, line 57-col. 17, line 19).

10. Claims 21, 57, 67, and 88 are rejected under 35 U.S.C. 102(e) as being anticipated by Basani et al. (6,748,447).

11. As per claim 21, Basani et al. teaches a network communication system, comprising: a plurality of destination devices, each of the plurality of destination devices comprising a destination synchronization mechanism and a destination data buffer (col. 9, line 57-col. 10, line 7 and col. 13, lines 23-41); and a source device comprising: a plurality of connection interfaces configured to support a plurality of connections with the plurality of destination devices (col. 23, line 59-col. 24, line 15), and a cluster manager

configured to determine performance similarities for the plurality of connections made via the plurality of connection interfaces (col. 16, lines 8-29) and to group the plurality of connections into performance clusters based on the determined performance similarities (col. 22, lines 30-37).

12. As per claim 57, Basani et al. teaches a source device, comprising: a plurality of connection interfaces (col. 20, lines 14-28); and a cluster manager configured to: determine at least one of client service and resource priorities (col. 21, line 59-col. 22, line 30), determine the performance similarities for a plurality of connections made via the plurality of connection interfaces (col. 16, lines 8-29), and group the plurality of connections into performance clusters based on the determined performance similarities and the determined service and resource priorities (col. 22, lines 30-37).

13. As per claim 67, Basani et al. teaches a network communication system comprising: an intermediate source device, wherein the intermediate source device comprises: a cluster manager configured to: determine subsets of connections from a set of connections, wherein each connection in each subset has similar performance capabilities with the other connections in the same subset (col. 15, line 58-col. 16, line 7), and group each of the subsets in a distinct performance cluster (col. 16, lines 8-29).

14. As per claim 88, Basani et al. teaches a source device, comprising: a connection interface (col. 15, line 58-col. 16, line 7); and a cluster manager configured to determine performance characteristics of the connection interface and assign the connection interface to a performance cluster having performance characteristics similar to the connection interface (col. 16, lines 8-29).

Claim Rejections - 35 USC § 103

15. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

16. Claims 2-6, 10-11, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Gillett, Jr. et al. (6,295,585) (referred to hereinafter as Gillett).

17. As per claim 2, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters. However, Gillett teaches a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters (see Gillett, col. 10, lines 14-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, further comprising a plurality of synchronization mechanisms coupled with a plurality of connection interfaces, wherein the cluster manager is configured to assign a synchronization mechanism to each of the performance clusters in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

18. As per claim 3, Hoyer et al. and Gillett teach the mentioned limitations of claims 1 and 2 above but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections (see Gillett, col. 15, lines 18-39). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is configured to provide computations and protocols needed to communicate data over the plurality of connections in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

19. As per claim 4, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, and 3 above but Hoyer et al. fails to teach a source device, further comprising a source data buffer coupled to the plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a plurality of destination devices interfaced with the source device via plurality of connection interfaces. However, Gillett teaches a source device, further comprising a source data buffer coupled to the plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a

plurality of destination devices interfaced with the source device via plurality of connection interfaces (see Gillett, col. 12, line 59-col. 13, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, further comprising a source data buffer coupled to the plurality of synchronization mechanisms and configured to store information, and wherein the source device is configured to share the data stored in the source data buffer with a plurality of destination devices interfaced with the source device via plurality of connection interfaces in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

20. As per claim 5, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance clusters include a high performance cluster. However, Gillett teaches a source device, wherein the performance clusters include a high performance cluster (see Gillett, col. 11, lines 61-65). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance clusters include a high performance cluster in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

21. As per claim 6, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance clusters include an intermediate performance cluster. However, Gillett teaches a source device, wherein

the performance clusters include an intermediate performance cluster (see Gillett, col. 14, lines 56-67). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance clusters include an intermediate performance cluster in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

22. As per claim 10, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections. However, Gillett teaches a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections (see Gillett, col. 15, lines 18-39). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity is determined based on the connection security of each of the plurality of connections in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

23. As per claim 11, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections. However, Gillett teaches a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections (see Gillett, col. 6, lines 33-45). It would have

been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity is determined based on the error rate of each of the plurality of connections in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

24. As per claim 14, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, 3, and 4 above but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed (see Gillett, col. 12, line 59-col. 13, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when data in the source data buffer has changed in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

25. As per claim 15, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, 3, and 4 but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when one of the destination devices requests an update. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when one of the destination devices requests an update (see Gillett, col. 13, line 66-col. 14, line 14). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices and then update the destination devices only when one of the destination devices requests an update in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

26. As per claim 16, Hoyer et al. and Gillett teach the mentioned limitations of claims 1, 2, 3, and 4 above but Hoyer et al. fails to teach a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the plurality of synchronization devices is further configured to update the destination

devices interfaced with the synchronization device only when all such destination devices have requested an update. However, Gillett teaches a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the plurality of synchronization devices is further configured to update the destination devices interfaced with the synchronization device only when all such destination devices have requested an update (see Gillett, col. 12, line 59-col. 13, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein each of the plurality of synchronization mechanisms is further configured to replicate the entire source data buffer on the plurality of destination devices, and wherein each of the plurality of synchronization devices is further configured to update the destination devices interfaced with the synchronization device only when all such destination devices have requested an update in order to provide an interconnect for parallel computing systems having high performance and recoverable communication in the presence of errors (see Gillett, Jr. et al., col. 2, lines 11-13).

27. Claims 7-9, 12, 13, and 84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Wipfel et al. (6,151,688) (referred to hereinafter as Wipfel).

28. As per claim 7, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a network communication system, wherein some of the plurality of

destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections. However, Wipfel teaches a network communication system, wherein some of the plurality of destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections (see Wipfel, col. 7, lines 19-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a network communication system, wherein some of the plurality of destination devices use low bandwidth connections with the source device, and wherein some of the performance clusters are low performance clusters configured to service the low performance connections in order to provide a major advantage of clusters which is their support for heterogeneous nodes (see Wipfel, col. 1, lines 47-54).

29. As per claim 8, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections. However, Wipfel teaches a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the plurality of connections (see Wipfel, col. 5, lines 36-56). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity for the plurality of connections is determined based on the bandwidth capability of each of the

plurality of connections in order to provides rapid communication between nodes (see Wipfel, col. 1, line 62-col. 2, line 3).

30. As per claim 9, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections. However, Wipfel teaches a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections (see Wipfel, col. 5, lines 36-56). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the performance similarity for the plurality of connections is determined based on the latency of each of the plurality of connections in order to provides rapid communication between nodes (see Wipfel, col. 1, line 62-col. 2, line 3).

31. As per claim 12, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities. However, Wipfel teaches a source device, wherein the cluster manager is further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities (see Wipfel, col. 8, lines 32-51). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the cluster manager is

further configured to detect a change in performance capabilities for one of the plurality of connections and to assign the connection to another performance cluster based on the change in performance capabilities in order to provide a way to coordinate shared resource access when an interconnect fails without relying on a local area network or a serial link (see Wipfel, col. 3, line 64-col. 4, line 6).

32. As per claim 13, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection. However, Wipfel teaches a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection (see Wipfel, col. 2, lines 12-21). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the cluster manager is further configured to detect a new connection, determine the performance capabilities of the new connection, and add the new connection to a performance cluster based on the performance capabilities of the new connection in order to implement cost-effective solutions by using less reliable nodes and swap nodes out when they fail (see Wipfel, col. 2, lines 12-21).

33. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Basani et al. as applied to claims 67, 68, and 83 above, and further in view of Wipfel. Basani teaches the mentioned limitations of claims 67, 68, and 83 above but fails to teach a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection and a remote source data buffer. However, Wipfel teaches a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection (see Wipfel, col. 4, lines 26-46) and a remote source data buffer (see Wipfel, col. 12, lines 21-32). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Basani et al. to a network communication system further comprising: a remote source device comprising: a remote synchronization mechanism that is coupled to the intermediate synchronization mechanism via a remote connection and a remote source data buffer in order to reallocate sharable resources without interrupting work on all nodes (see Wipfel, col. 3, line 64-col. 4, line 6).

34. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Kremien (20010034752).

35. As per claim 17, Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein determining the performance similarities for

the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections. However, Kremien teaches a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections (see Kremien, paragraph 0064). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein determining the performance similarities for the plurality of connections comprises: assigning all of the plurality of connections to a primary performance cluster; and gathering the average latency for each of the plurality of connections in order to enable centralized load balancing solution's their decision making by maintaining state information regarding all cluster members in one location. (see Kremien, paragraph 0009).

36. As per claim 18, Hoyer et al. and Kremien teach the mentioned limitations of claims 1, and 17 above but Hoyer et al. fails to teach a source device, wherein the cluster manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections. However, Kremien teaches a source device, wherein the cluster manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections (see Kremien, paragraph 0030). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein the cluster

manager is further configured to group the plurality of connections into performance clusters based on the average latency of each of the plurality of connections in order to provide a distributed load balancing system and method for resource management in a computer network (see Kremien, paragraph 0024).

37. Claim 19, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. and Kremien (20010034752) as applied to claims 1 and 17 above, and further in view of (Quarterman et al. (2002/0177910). Hoyer et al. and Kremien teach the mentioned limitations of claims 1 and 17 above but fail to teach a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections; determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster; and determining the number of performance clusters required based on the mean latency for the primary performance cluster and standard deviation of the average latencies for each of the plurality of connections. However, Quarterman et al. teaches a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections (see Quarterman et al., paragraph 0158); determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster (see

Quarterman et al., paragraph 0150); and determining the number of performance clusters required based on the mean latency for the primary performance cluster (see Quarterman et al., paragraph 0158) and standard deviation of the average latencies for each of the plurality of connections(see Quarterman et al., paragraph 0150). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. and Kremien to a source device, wherein grouping the plurality of connections into performance clusters further comprises: determining a mean latency for the primary performance cluster based on the average latencies for each of the plurality of connections; determining a standard deviation of the average latencies for each of the plurality of connections relative to the mean latency for the primary performance cluster; and determining the number of performance clusters required based on the mean latency for the primary performance cluster and standard deviation of the average latencies for each of the plurality of connections in order to accurately characterize the performance of such a large network, (see Quarterman et al., paragraph 0006).

38. Claim 20, are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoyer et al. as applied to claim 1 above, and further in view of Hendricks et al. (6,463,585). Hoyer et al. teaches the mentioned limitations of claim 1 above but fails to teach a source device, wherein grouping the plurality of connections into performance clusters further comprises grouping the connections using a sum-of-squares determination. However, Hendricks et al. teaches a source device, wherein grouping the plurality of

connections into performance clusters further comprises grouping the connections using a sum-of-squares determination (see Hendricks et al., col. 70, line 57-col. 71, line 2). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Hoyer et al. to a source device, wherein grouping the plurality of connections into performance clusters further comprises grouping the connections using a sum-of-squares determination in order to analyze the program watched information and marketing data 720, 722, and provide the analyzed information to the processing and editing subroutines (see Hendricks et al., col. 11, lines 26-50).

39. Claims 61 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Basani et al. as applied to claim 57 above, and further in view of VanHuben et al. (6,038,651).

40. As per claim 61, Basani et al. teaches the mentioned limitations of claim 57 above but fails to teach a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource priorities are more important. However, VanHuben et al. teaches a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource priorities are more important (see VanHuben et al., col. 1, line 48-col. 2, line 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Basani et al. to a source device, wherein the cluster manager is configured to create fewer performance clusters when it is determined that resource

priorities are more important in order to manage the interface between two clusters in a bi-nodal SMP system (see VanHuben et al., col. 3, lines 57-67).

41. As per claim 62, Basani et al. teaches the mentioned limitations of claim 57 above but fails to teach a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority. However, VanHuben et al. teaches a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority (see VanHuben et al., col. 1, line 48-col. 2, line 4). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Basani et al. to a source device, wherein the cluster manager is configured to create more performance clusters, when it is determined that client service is more of a priority in order to manage the interface between two clusters in a bi-nodal SMP system (see VanHuben et al., col. 3, lines 57-67).

42. Claims 22-56, 58-60, 63-65, 68-83, 85-87, and 89-92 have similar limitations as to claims 1-21, 57, 61, 62, 66, 67, 84, and 88, therefore, they are being rejected under the same rationale.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571) 272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER